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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/695,357	10/24/2000	Kumar Balachandran	8194-393	2727
20792	7590	05/15/2006	EXAMINER KUMAR, PANKAJ	
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627			ART UNIT 2611	PAPER NUMBER

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/695,357	Applicant(s) BALACHANDRAN ET AL.	
	Examiner Pankaj Kumar	Art Unit 2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/3/2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) See Continuation Sheet is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-3,5-9,11,12,14-19,21,22,24,25,27-33,35,36,38,39,41-46,49 and 50 is/are allowed.
- 6) ☒ Claim(s) 48 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims pending in the application are 1-3,5-9,11,12,14-19,21,22,24,25,27-33,35,36,38,39,41-46 and 48-50.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 3/3/2006 are partially persuasive and partially not persuasive.
2. Applicant argues on page 17 that "With reference to FIG. 3, Eswara explains that the four beams A, B, C, and D shown in FIG. 4 "would have an assigned set of traffic frequencies for use by MSs and a control frequency for assigning traffic frequencies." (Eswara, col. 3, lines 45 - 48)." And then argues that "applicants can find no disclosure or suggestion in Eswara indicating that one or more frequencies used in one of the beams A, B, C, or D may be within the bandwidth defined by frequencies used in another one of the beams A, B, C, or D." This is not persuasive since applicant has acknowledged that "Eswara explains that the four beams A, B, C, and D shown in FIG. 4 "would have an assigned set of traffic frequencies for use by MSs and a control frequency for assigning traffic frequencies.'" (emphasis added). Accordingly, at least "the four beams would have ... a control frequency" means that the four beams have a control frequency. Since it is a control frequency and not control frequencies, there can only be one control frequency for the beams A, B, C, and D and thus it is inherent that it is the same control frequency as there is only one control frequency and thus inherently it is in the same bandwidth as there is only one control frequency.
3. Applicant's argument with respect to claim 50 is persuasive.

Response to Amendment

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 48 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eswara in view of Almgren. See a prior action for details.

Allowable Subject Matter

6. Claims 1-3, 5-9, 11, 12, 14-19, 21, 22, 24, 25, 27-33, 35, 36, 38, 39, 41-46, 49 and 50 are allowed.

7. The following is a statement of reasons for the indication of allowable subject matter:

The art of record does not suggest the respective claim combinations together and nor would the respective claim combinations be obvious with:

8. As per claims 1-3, 5-8: wherein each of the plurality of cells has predefined control time slots associated therewith that are used to communicate the control information and has predefined traffic time slots associated therewith that are used to communicate the traffic information and at least one defined idle time slot separates at least one of the predefined control time slots from at least one of the predefined traffic time slots, which are associated with different primary frequencies.

9. As per claims 9, 11, 12, 14-18: wherein the base station subsystem is configured to transmit a hopping sequence to the mobile terminal using the control frequency, and wherein the

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control information is exchanged during predefined control time slots and the traffic information is exchanged during predefined traffic time slots and at least one defined idle time slot separates at least one of the predefined control time slots from at least one of the predefined traffic time slots, which are associated with different frequencies.

10. As per claims 19, 21, 22, 24, 25, 28, 29, 31, 32: wherein the control information is exchanged during predefined control time slots and the traffic information is exchanged during predefined traffic time slots and at least one defined idle time slot separates at least one of the predefined control time slots from at least one of the predefined traffic time slots, which are associated with different frequencies.

11. As per claim 33, 35, 36, 38, 39, 42, 43, 45, 46: wherein the control information is exchanged during predefined control time slots and the traffic information is exchanged during predefined traffic time slots and at least one defined idle time slot separates at least one of the predefined control time slots from at least one of the predefined traffic time slots, which are associated with different frequencies.

12. Claims 27, 30, 41, 44, 49 are discussed in a prior action.

13. As per claim 50: each of the plurality of traffic frequencies being associated with an equivalence class of frequencies; randomly selecting a frequency from each of the plurality of equivalence classes of frequencies.

Conclusion

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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15. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

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16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pankaj Kumar whose telephone number is (571) 272-3011. The examiner can normally be reached on Mon, Tues, Thurs and Fri after 8AM to after 6:30PM.

17. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jay Patel can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

18. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Pankaj Kumar
Patent Examiner
Art Unit 2611

PK